

**ABSTRACT**

The present invention has an object of providing a variable optical filter that can move its periodic filter characteristic over a wide range in parallel to an optical frequency axis direction. To this end, the variable optical filter of the present invention comprises: first and second filter sections connected in series via an optical path, and a control section for controlling the periodic filter characteristic of each of the first and second filter sections. The control section, when the filter characteristic of one of the first and second filter sections is required to move in parallel to the optical frequency axis direction to exceed a variable range, relatively controls the filter characteristic of each of the first and second filter sections such that the switching is performed from one filter section to the other filter section, provided that the filter characteristic of the overall variable optical filters becomes constant.